

# Board of Trustees

## Monthly Performance Report - July 31, 2017



All returns are annualized (for periods greater than one year), gross of fees (before fees) unless otherwise noted, and provided by Callan Associates, Inc.

	Market Values as of 7/31/2017*	(A)	(B)	(C)	(D)	(E)	(F)	(G)
		1 Month	FYTD	3 Month	CYTD	1 Year	3 Years	5 Years
<b>1 TOTAL FUND</b>	<b>61,265,264,841</b>	<b>1.49%</b>	<b>1.49%</b>	<b>3.36%</b>	<b>9.15%</b>	<b>11.53%</b>	<b>6.92%</b>	<b>9.01%</b>
2 Passive Index Benchmark <sup>1</sup>		2.21%	2.21%	4.18%	10.49%	9.30%	4.54%	7.35%
3 Performance Benchmark <sup>2</sup>		1.46%	1.46%	3.05%	8.00%	8.62%	5.28%	7.98%
4 Total Fund Return Objective <sup>3</sup>		0.34%	0.34%	1.33%	4.25%	6.73%	5.91%	6.34%
<b>5 PUBLIC EQUITIES</b>	<b>27,212,571,962</b>	<b>2.98%</b>	<b>2.98%</b>	<b>5.70%</b>	<b>15.32%</b>			
6 MSCI ACWI IMI		2.74%	2.74%	5.41%	14.38%			
7 <b>INTERNATIONAL EQUITIES</b>	<b>10,020,165,804</b>	<b>4.11%</b>	<b>4.11%</b>	<b>7.96%</b>	<b>20.73%</b>	<b>21.07%</b>	<b>3.35%</b>	<b>7.89%</b>
8 MSCI ACWI IMI EX-US		3.66%	3.66%	7.30%	18.49%	18.87%	2.74%	8.07%
9 <b>GLOBAL EQUITIES</b>	<b>9,916,422,385</b>	<b>2.62%</b>	<b>2.62%</b>	<b>4.81%</b>	<b>13.47%</b>	<b>16.95%</b>	<b>6.53%</b>	<b>11.79%</b>
10 MSCI ACWI IMI		2.74%	2.74%	5.41%	14.38%	17.06%	6.37%	11.08%
11 <b>DOMESTIC EQUITIES</b>	<b>7,275,978,134</b>	<b>1.92%</b>	<b>1.92%</b>	<b>3.79%</b>	<b>10.66%</b>	<b>16.97%</b>	<b>10.27%</b>	<b>15.16%</b>
12 RUSSELL 3000 INDEX		1.89%	1.89%	3.86%	10.99%	16.14%	10.52%	14.79%
<b>13 FIXED INCOME PLUS</b>	<b>12,441,348,726</b>	<b>0.92%</b>	<b>0.92%</b>	<b>1.97%</b>	<b>4.65%</b>			
14 PUBLIC INCOME BENCHMARK <sup>4</sup>		0.86%	0.86%	1.80%	4.26%			
15 <b>FIXED INCOME PLUS CASH</b>	<b>459,351,145</b>	<b>0.13%</b>	<b>0.13%</b>	<b>0.32%</b>	<b>0.55%</b>			
16 90 DAY T-BILLS		0.09%	0.09%	0.22%	0.39%			
17 <b>US FIXED INCOME AGGREGATE</b>	<b>3,334,253,138</b>	<b>0.47%</b>	<b>0.47%</b>	<b>1.15%</b>	<b>2.78%</b>	<b>0.24%</b>	<b>2.86%</b>	
18 BC AGGREGATE		0.43%	0.43%	1.10%	2.71%	-0.51%	2.71%	
19 <b>US INVESTMENT GRADE CORPORATE</b>	<b>3,309,305,829</b>	<b>0.79%</b>	<b>0.79%</b>	<b>2.41%</b>	<b>4.79%</b>	<b>2.19%</b>	<b>4.60%</b>	<b>4.16%</b>
20 BC CORPORATE		0.73%	0.73%	2.20%	4.56%	1.55%	3.88%	3.53%
21 <b>NON US FIXED INCOME</b>	<b>772,839,512</b>	<b>0.10%</b>	<b>0.10%</b>	<b>0.08%</b>	<b>0.75%</b>	<b>-1.78%</b>	<b>3.49%</b>	<b>3.38%</b>
22 BC GLOBAL AGG EX-US		0.23%	0.23%	0.18%	0.59%	-1.73%	3.81%	3.81%
23 <b>GLOBAL HIGH YIELD</b>	<b>1,240,002,246</b>	<b>1.40%</b>	<b>1.40%</b>	<b>2.29%</b>	<b>5.63%</b>	<b>9.86%</b>	<b>4.88%</b>	<b>6.18%</b>
24 BC US HIGH YIELD 2% ISSUER CAP		1.11%	1.11%	2.12%	6.09%	10.94%	5.35%	6.73%
25 <b>EMERGING MARKET DEBT</b>	<b>748,532,779</b>	<b>1.87%</b>	<b>1.87%</b>	<b>3.17%</b>	<b>9.10%</b>	<b>8.56%</b>	<b>1.88%</b>	<b>2.71%</b>
26 BC EMD HARD CURRENCY AGG		1.21%	1.21%	2.30%	7.10%	5.31%	4.06%	4.59%
27 <b>TIPS</b>	<b>723,525,949</b>	<b>0.43%</b>	<b>0.43%</b>	<b>-0.48%</b>	<b>1.38%</b>	<b>-0.81%</b>	<b>0.68%</b>	<b>0.01%</b>
28 BC US TIPS		0.45%	0.45%	-0.55%	1.30%	-1.04%	0.77%	-0.02%
29 <b>REITS</b>	<b>1,261,764,935</b>	<b>1.94%</b>	<b>1.94%</b>	<b>3.30%</b>	<b>5.71%</b>	<b>-1.86%</b>	<b>6.57%</b>	<b>8.35%</b>
30 S&P GLOBAL REIT		1.81%	1.81%	2.87%	5.00%	-4.91%	5.16%	7.28%
31 <b>LISTED INFRASTRUCTURE</b>	<b>591,773,192</b>	<b>2.11%</b>	<b>2.11%</b>	<b>5.52%</b>	<b>16.86%</b>			
32 S&P GLOBAL LISTED INFRASTRUCTURE		3.29%	3.29%	7.32%	17.57%			
<b>33 PRIVATE EQUITY AND GROWTH OPPORTUNITIES</b>	<b>6,784,638,395</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>11.64%</b>			
34 <b>PRIVATE EQUITY</b>	<b>4,161,711,528</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>11.96%</b>	<b>19.28%</b>	<b>16.53%</b>	<b>18.25%</b>
35 PRIVATE EQUITY CUSTOM BENCHMARK <sup>6</sup>		N/A	N/A	N/A	N/A	4.80%	2.56%	9.44%
36 <b>GROWTH OPPORTUNITIES</b>	<b>2,622,926,867</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>11.10%</b>			
37 CAMBRIDGE PRIVATE EQUITY		N/A	N/A	N/A	N/A			
<b>38 REAL ESTATE**</b>	<b>5,571,144,245</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>1.05%</b>	<b>2.69%</b>	<b>8.48%</b>	<b>9.68%</b>
39 NCREIF TOTAL INDEX		N/A	N/A	N/A	3.32%	6.34%	9.85%	10.32%
<b>40 INFRASTRUCTURE, PRIVATE CREDIT AND INCOME OPPORTUNITIES</b>	<b>3,157,740,648</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>5.36%</b>			
41 INFRASTRUCTURE, PRIVATE CREDIT AND INCOME OPPORTUNITIES <sup>5</sup>		N/A	N/A	N/A	9.89%			
42 <b>INFRASTRUCTURE</b>	<b>1,870,660,259</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>5.61%</b>	<b>8.96%</b>	<b>14.78%</b>	<b>13.58%</b>
43 <b>PUBLIC/PRIVATE CREDIT</b>	<b>1,117,969,966</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>5.08%</b>	<b>9.71%</b>	<b>6.08%</b>	<b>7.79%</b>
44 <b>INCOME OPPORTUNITIES</b>	<b>169,110,423</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>4.55%</b>	<b>8.07%</b>		
<b>45 ABSOLUTE RETURN</b>	<b>2,170,180,530</b>	<b>N/A</b>	<b>N/A</b>	<b>0.31%</b>	<b>3.44%</b>	<b>6.67%</b>	<b>2.03%</b>	<b>3.56%</b>
46 ABSOLUTE RETURN BENCHMARK <sup>7</sup>		N/A	N/A	1.66%	4.78%	6.96%	6.13%	5.78%
<b>47 ASSET ALLOCATION</b>	<b>3,927,640,335</b>	<b>N/A</b>	<b>N/A</b>	<b>0.14%</b>	<b>1.61%</b>			
48 <b>APF FI LIQUIDITY</b>	<b>799,861,045</b>	<b>0.15%</b>	<b>0.15%</b>					
49 <b>CASH</b>	<b>697,428,910</b>	<b>0.11%</b>	<b>0.11%</b>	<b>0.30%</b>	<b>0.47%</b>	<b>0.56%</b>	<b>0.23%</b>	<b>0.14%</b>
50 90 DAY T-BILLS		0.09%	0.09%	0.22%	0.39%	0.54%	0.26%	0.19%
51 <b>MULTI-ASSET CLASS</b>	<b>2,430,350,380</b>	<b>N/A</b>	<b>N/A</b>	<b>-0.06%</b>	<b>2.58%</b>	<b>6.68%</b>	<b>4.26%</b>	<b>5.03%</b>
52 <b>PERFORMANCE BENCHMARK<sup>2</sup></b>		<b>N/A</b>	<b>N/A</b>	<b>3.05%</b>	<b>8.00%</b>	<b>8.62%</b>	<b>5.28%</b>	<b>7.98%</b>

<sup>1</sup> Passive Benchmark is a blended benchmark (60% MSCI All-Country World Index IMI; 20% BC Global Aggregate Index; 10% FTSE EPRA/NAREIT Rental Index; 10% US TIPS) from 9/30/2016 to date. Prior periods are described in Investment Policy.

<sup>2</sup> Performance Benchmark is a blended benchmark (42% MSCI ACWI IMI; 11% NCREIF Total Index; 11% Cambridge Private Equity; 6% BC US Corporate; 6% BC Aggregate; 5% HFRI Total HFOF Universe; 4% BC US High Yield 2% Issuer Cap; 3% 90 Day T-Bills; 3% FTSE Developed Core Infrastructure TRI; 2% S&P Global REIT; 2% BC Global Agg ex-US; 1% S&P Global Listed Infrastructure; 1% BC EMD Hard Currency Agg; 1% BC US TIPS) from 9/30/2016 to date. Prior periods are described in Investment Policy.

<sup>3</sup> Total Fund Return Objective is the Consumer Price Index (All Urban Consumers, U.S. City Average, All Items, Unadjusted Index) plus 5%.

<sup>4</sup> Public Income Plus Benchmark is a blended benchmark (25% BC Aggregate; 25% BC US Corporate; 10% S&P Global REIT; 10% BC US High Yield 2% Issuer Cap; 10% BC Global Agg ex-US; 5% S&P Global Listed Infrastructure; 5% BC EMD Hard Currency Agg; 5% BC US TIPS; 5% 90 Day T-Bills) from 9/30/2016 to date.

<sup>5</sup> Infrastructure, Private Credit and Income Opportunities Benchmark is a blended benchmark (60% FTSE Developed Core Infrastructure TRI; 40% BC US High Yield 2% Issuer Cap) from 9/30/2016 to date.

<sup>6</sup> Private Equity Custom Benchmark is 60% Russell 3000 and 40% MSCI EAFE through 9/30/2016 then Cambridge Private Equity thereafter.

<sup>7</sup> Absolute Return Benchmark is LIBOR + 4% through 6/30/2013, LIBOR + 6% from 7/1/2013 through 6/30/2015, LIBOR + 5% from 7/1/2015 through 9/30/2016, and HFRI Total HFOF Universe thereafter.

\* All reported market values represent total fund holdings, which consists of 99.16% APF and 0.84% AMH, and includes estimates when final valuations are unavailable due to timing.

\*\* Real Estate returns include REITs prior to 9/30/2016.

		(A)	(B)	(C)	(D)	(E)	(F)	(G)
		Market Values as of 7/31/2017		Returns as of 7/31/2017				
		1 Month	FYTD	3 Month	CYTD	1 Year	3 Years	5 Years
53	<b>PUBLIC EQUITIES</b>	27,212,571,962	2.98%	2.98%	5.70%	15.32%		
54	MSCI ACWI IMI		2.74%	2.74%	5.41%	14.38%		
55	<b>INTERNATIONAL EQUITIES</b>	10,020,165,804	4.11%	4.11%	7.96%	20.73%	21.07%	3.35%
56	MSCI ACWI IMI EX-US		3.66%	3.66%	7.30%	18.49%	18.87%	2.74%
57	Macquarie Investment Management Emerging Markets	302,462,967	8.09%	8.09%	12.26%	32.59%	34.14%	3.77%
58	JP Morgan Emerging Markets	507,070,178	5.46%	5.46%	10.12%	26.11%	23.20%	5.20%
59	Lee Munder Emerging Markets	164,158,959	4.67%	4.67%	10.11%	25.75%	24.92%	2.06%
60	Mondrian Investment Partners	587,353,785	3.74%	3.74%	6.42%	20.35%	16.16%	0.51%
61	SSgA MSCI Emerging Markets	250,015,316	5.14%	5.14%	9.30%	24.41%	23.38%	2.29%
62	William Blair Emerging Markets	605,496,275	7.39%	7.39%	12.51%	29.82%	24.26%	4.51%
63	MSCI Emerging Markets Index		5.96%	5.96%	10.19%	25.49%	24.84%	2.39%
64	DFA Emerging Markets Value	549,427,215	5.52%	5.52%	7.73%	22.19%	25.22%	
65	MSCI Emerging Markets Value Index		5.29%	5.29%	7.73%	19.66%	21.48%	
66	DFA Emerging Markets Small Cap	191,261,588	4.27%	4.27%	5.38%	21.62%	17.83%	
67	MSCI Emerging Markets Small Cap Index		3.57%	3.57%	5.10%	20.13%	16.23%	
68	Trustbridge Emerging Markets	140,034,623	9.22%	9.22%	18.69%	44.16%	47.45%	
69	Wells Capital	61,597,423	2.72%	2.72%	13.72%	28.82%		
70	MSCI China Index ND		8.89%	8.89%	17.27%	35.96%	39.08%	
71	Mellon MSCI World ex-USA	1,380,675,391	2.98%	2.98%	6.67%	16.48%	17.63%	2.60%
72	DFA International Large Cap	889,691,494	3.47%	3.47%	7.27%	16.67%	20.52%	2.49%
73	Int'l Passive/Quasi-Passive Custom Benchmark <sup>1</sup>		2.98%	2.98%	6.51%	16.18%	17.27%	2.28%
74	DFA International Small Cap Value	408,557,707	3.79%	3.79%	7.66%	18.78%	25.09%	7.49%
75	MSCI World ex-USA Small Cap Value Index		3.72%	3.72%	7.25%	17.91%	20.21%	4.91%
76	DFA International Small Company	401,862,529	3.56%	3.56%	7.82%	20.49%	21.27%	7.36%
77	SSgA International Developed Small Cap Index	388,575,098	3.37%	3.37%	7.33%	19.65%	18.51%	6.48%
78	MSCI World ex-USA Small Cap Index		3.52%	3.52%	7.26%	19.51%	18.49%	6.16%
79	Acadian Asset Mgmt	800,887,209	2.86%	2.86%	6.51%	18.16%	16.49%	5.05%
80	MSCI Custom Benchmark <sup>2</sup>		3.49%	3.49%	6.32%	14.12%	22.45%	2.97%
81	LSV International Large Cap	543,222,137	3.95%	3.95%	7.21%	18.52%	27.66%	
82	Schroders International Large Cap	589,042,967	3.15%	3.15%	6.10%	16.81%	18.53%	
83	MSCI All Country World ex-USA Value Index		3.91%	3.91%	6.65%	15.37%	22.24%	
84	SSgA International	265,614,607	3.26%	3.26%	7.33%	15.46%	15.67%	2.64%
85	MSCI World ex-USA/MSCI EAFE <sup>3</sup>		2.98%	2.98%	6.51%	16.18%	17.27%	2.28%
86	Johnston International Large Cap	386,820,189	4.09%	4.09%	8.69%	26.49%	23.08%	
87	JP Morgan International Large Cap	606,298,372	3.19%	3.19%	7.40%	22.09%	18.90%	
88	MSCI World ex-USA Growth Index		2.46%	2.46%	6.73%	18.42%	12.29%	
89	<b>GLOBAL EQUITIES</b>	9,916,422,385	2.62%	2.62%	4.81%	13.47%	16.95%	6.53%
90	MSCI ACWI IMI		2.74%	2.74%	5.41%	14.38%	17.06%	6.37%
91	AQR Global Equity	1,664,571,196	3.53%	3.53%	6.43%	15.45%	19.84%	8.60%
92	SSgA MSCI World	167,333,607	2.43%	2.43%	5.16%	13.67%	16.67%	7.14%
93	MSCI World Index		2.39%	2.39%	4.96%	13.31%	16.12%	6.64%
94	SSgA Russell Fundamental Developed Lrg Co	1,495,508,271	2.66%	2.66%	4.76%	10.90%	16.62%	5.72%
95	Russell Fundamental Dvlpd Lrg Co Index		2.64%	2.64%	4.67%	10.78%	16.87%	5.82%
96	Lazard Asset Management <sup>4</sup>	2,095,897,836	2.64%	2.64%	4.65%	13.01%	14.51%	6.76%
97	McKinley Capital Management	817,825,437	3.63%	3.63%	6.11%	18.19%	19.92%	7.40%
98	MSCI All-Country World Index		2.79%	2.79%	5.54%	14.59%	17.06%	6.22%
99	APF Tactical Tilts	3,521,302,405	1.88%	1.88%	3.90%	13.20%	18.99%	
100	SSGA MSCI ACWI IMI	153,983,634	2.69%	2.69%	5.47%	14.44%	17.22%	
101	MSCI All-Country World IMI		2.74%	2.74%	5.41%	14.38%	17.06%	
102	<b>DOMESTIC EQUITIES</b>	7,275,978,134	1.92%	1.92%	3.79%	10.66%	16.97%	10.27%
103	RUSSELL 3000 INDEX		1.89%	1.89%	3.86%	10.99%	16.14%	10.52%
104	Mellon S&P 500	167,452,568	2.05%	2.05%	4.14%	11.59%	16.07%	10.79%
105	S&P 500 Index		2.06%	2.06%	4.14%	11.59%	16.04%	10.87%
106	Mellon FTSE RAFI US Large Cap	325,801,412	1.72%	1.72%	2.94%	6.51%	15.12%	9.11%
107	FTSE RAFI US 1000 Index		1.69%	1.69%	2.92%	6.46%	15.08%	9.23%
108	AGI - Large Cap	779,366,346	2.60%	2.60%	5.27%	16.37%	16.13%	12.06%
109	SSgA Large Cap	438,252,574	4.24%	4.24%	7.13%	21.90%	21.84%	12.56%
110	DSM - Large Cap	443,107,306	5.18%	5.18%	11.84%	29.01%	26.86%	14.73%
111	CastleArk - Large Cap	342,230,023	2.71%	2.71%	5.67%	16.97%	17.39%	12.52%
112	APF SPDR Yield	395,144,396	0.90%	0.90%	1.35%	6.11%	12.43%	
113	APF SPDR Momentum	395,868,643	2.03%	2.03%	2.53%	9.66%	13.11%	
114	APF SPDR Low Vol	399,555,205	0.90%	0.90%	2.39%	9.09%	11.83%	
115	Russell 1000 Growth Index		2.66%	2.66%	5.05%	17.02%	18.05%	12.66%
116	Russell 1000 Index		1.98%	1.98%	4.00%	11.44%	15.95%	10.58%
117	Herndon	360,840,644	2.18%	2.18%	4.62%	10.37%	17.80%	4.04%
118	Lyrical	603,762,371	1.53%	1.53%	3.03%	10.31%	22.24%	8.66%
119	SKBA	320,627,109	2.32%	2.32%	3.89%	6.06%	14.76%	8.59%
120	LSV	658,415,741	1.67%	1.67%	2.96%	5.04%	16.69%	
121	Russell 1000 Value Index		1.33%	1.33%	2.88%	6.05%	13.76%	8.45%
122	Mellon S&P 400	160,632,295	0.88%	0.88%	2.01%	6.91%	14.69%	10.47%
123	S&P 400 Index		0.88%	0.88%	2.02%	6.92%	14.69%	10.44%
124	Jennison Associates LLC	272,999,423	0.82%	0.82%	3.09%	10.82%	17.64%	9.15%
125	Russell 2000 Index		0.74%	0.74%	2.11%	5.77%	18.45%	9.89%
126	RBC Asset Mgmt	255,731,667	0.32%	0.32%	3.57%	4.24%	12.26%	10.18%
127	Eagle Asset Mgmt	273,286,786	0.80%	0.80%	2.39%	14.28%	17.40%	11.72%
128	Russell 2000 Growth Index		0.85%	0.85%	3.37%	10.91%	17.76%	10.22%
129	Russell 2000 Index		0.74%	0.74%	2.11%	5.77%	18.45%	9.89%
130	T Rowe Price	270,511,320	0.79%	0.79%	1.32%	2.79%	19.51%	10.89%
131	Pzena Investment Mgmt	279,226,336	0.43%	0.43%	-2.09%	-2.43%	21.76%	12.52%
132	Russell 2000 Value Index		0.63%	0.63%	0.91%	1.18%	19.21%	9.50%
133	Russell 2000 Index		0.74%	0.74%	2.11%	5.77%	18.45%	9.89%
		Market Values as of 7/31/2017		Returns as of 6/30/2017				
134	AGI Structured Alpha	133,165,969			3.66%	10.25%	20.35%	
135	S&P 500 Index				3.09%	9.34%	17.90%	

<sup>1</sup> Int'l Passive/Quasi-Passive Custom Benchmark is MSCI EAFE through 5/26/10 then MSCI World ex US thereafter.

<sup>2</sup> MSCI Custom Blend benchmark is MSCI EAFE TRI through 2/28/11, MSCI World ex-USA TRI through 4/30/2016, then MSCI World ex-USA Value TRI thereafter.

<sup>3</sup> MSCI World ex-USA/MSCI EAFE benchmark is MSCI EAFE TRI through 2/28/11 then MSCI World ex-USA TRI thereafter.

<sup>4</sup> Lazard global equity accounts' annual fees do not include fees paid on imbedded mutual fund positions.

		(A)	(B)	(C)	(D)	(E)	(F)	(G)		
		Market Values as of 7/31/2017		Returns as of 7/31/2017						
			1 Month	FYTD	3 Month	CYTD	1 Year	3 Years	5 Years	
136	<b>FIXED INCOME PLUS</b>	12,441,348,726	0.92%	0.92%	1.97%	4.65%				
137	PUBLIC INCOME BENCHMARK		0.86%	0.86%	1.80%	4.26%				
138	<b>FIXED INCOME PLUS CASH</b>	459,351,145	0.13%	0.13%	0.32%	0.55%				
139	90 DAY T-BILLS		0.09%	0.09%	0.22%	0.39%				
140	APF Fixed Income Plus Cash	459,350,970	0.13%	0.13%	0.32%					
141	<b>US FIXED INCOME AGGREGATE</b>	3,334,253,138	0.47%	0.47%	1.15%	2.78%	0.24%	2.86%		
142	BC AGGREGATE		0.43%	0.43%	1.10%	2.71%	-0.51%	2.71%		
143	APF Fixed Income - Aggregate	3,334,253,138	0.47%	0.47%	1.15%	2.78%	0.24%	2.86%		
144	<b>US INVESTMENT GRADE CORPORATE</b>	3,309,305,829	0.79%	0.79%	2.41%	4.79%	2.19%	4.60%	4.16%	
145	BC CORPORATE		0.73%	0.73%	2.20%	4.56%	1.55%	3.88%	3.53%	
146	APF Corporate Bonds	3,309,305,829	0.79%	0.79%	2.41%	4.79%	2.19%	4.60%	4.16%	
147	<b>NON US FIXED INCOME</b>	772,839,512	0.10%	0.10%	0.08%	0.75%	-1.78%	3.49%	3.38%	
148	BC GLOBAL AGG EX-US		0.23%	0.23%	0.18%	0.59%	-1.73%	3.81%	3.81%	
149	Rogge Global Partners	341,935,596	0.27%	0.27%	0.29%	0.87%	-1.49%	3.64%	3.42%	
150	APF Global Government Bonds	430,903,916	0.35%	0.35%	0.28%	1.06%	-1.71%	3.43%		
151	<b>GLOBAL HIGH YIELD</b>	1,240,002,246	1.40%	1.40%	2.29%	5.63%	9.86%	4.88%	6.18%	
152	BC US HIGH YIELD 2% ISSUER CAP		1.11%	1.11%	2.12%	6.09%	10.94%	5.35%	6.73%	
153	Oaktree High Yield	578,745,881	1.09%	1.09%	2.43%	5.43%	9.07%	4.31%	5.59%	
153	Capital Guardian High Yield	396,333,729	2.02%	2.02%	2.07%	6.03%	11.98%	6.55%	7.73%	
154	APF High Yield	264,692,805	1.28%	1.28%	2.58%					
155	BC US High Yield 2% Issuer Cap Index		1.11%	1.11%	2.12%	6.09%	10.94%	5.35%	6.73%	
156	HY Fixed Income Custom Blend <sup>1</sup>		1.11%	1.11%	2.12%	6.09%	10.94%	5.59%	7.25%	
157	<b>EMERGING MARKET DEBT</b>	748,532,779	1.87%	1.87%	3.17%	9.10%	8.56%	1.88%	2.71%	
158	BC EMD HARD CURRENCY AGG		1.21%	1.21%	2.30%	7.10%	5.31%	4.06%	4.59%	
159	Capital Guardian HY Emerging Markets Gov't	646,953,667	1.88%	1.88%	3.18%	9.11%	8.57%	1.89%	2.72%	
160	APF Emerging Market Debt	101,579,112								
161	HY Emerging Markets Benchmark <sup>2</sup>		1.37%	1.37%	2.88%	9.75%	6.30%	1.54%	1.92%	
162	<b>TIPS</b>	723,525,949	0.43%	0.43%	-0.48%	1.38%	-0.81%	0.68%	0.01%	
163	BC US TIPS		0.45%	0.45%	-0.55%	1.30%	-1.04%	0.77%	-0.02%	
164	APF TIPS	623,391,217	0.41%	0.41%	-0.51%	1.40%	-0.97%	0.83%	0.05%	
165	BC U.S. TIPS		0.45%	0.45%	-0.55%	1.30%	-1.04%	0.77%	-0.02%	
166	Alaska Permanent Capital Mgmt	100,134,732	0.52%	0.52%	-0.29%	1.24%	-0.27%	0.66%	0.06%	
167	BC U.S. TIPS 1-10 Year Index		0.50%	0.50%	-0.34%	1.16%	-0.08%	0.60%	-0.01%	
168	<b>REITS</b>	1,261,764,935	1.94%	1.94%	3.30%	5.71%	-1.86%	6.57%	8.35%	
169	S&P GLOBAL REIT		1.81%	1.81%	2.87%	5.00%	-4.91%	5.16%	7.28%	
170	AEW Global RE Securities	508,290,821	2.03%	2.03%	4.28%	6.13%	-2.93%	7.03%	9.05%	
171	American Homes 4 Rent <sup>3</sup>	38,470,281	1.95%	1.95%	-5.29%	3.71%	1.45%	7.35%		
172	MSCI US REIT Index		1.27%	1.27%	2.77%	3.97%	-4.58%	8.61%	9.23%	
173	REIT Benchmark <sup>4</sup>		1.88%	1.88%	3.63%	5.81%	-4.11%	6.26%	8.55%	
174	<b>SSGA REITS</b>	715,003,833	1.87%	1.87%	3.11%	5.50%				
175	S&P GLOBAL REIT		1.81%	1.81%	2.87%	5.00%				
176	<b>LISTED INFRASTRUCTURE</b>	591,773,192	2.11%	2.11%	5.52%					
177	S&P GLOBAL LISTED INFRASTRUCTURE		3.29%	3.29%	7.32%					
178	Lazard Listed Infrastructure	184,232,828	1.23%	1.23%	3.96%	19.03%	24.33%	15.32%		
179	FTSE Core Developed Infrastructure (Hedged)		0.25%	0.25%	1.91%	9.63%	9.24%	9.32%		
180	Cohen & Steers Listed Infrastructure	134,517,556	1.23%	1.23%	3.75%	13.85%	9.85%	5.61%		
181	FTSE Core Developed Infrastructure Custom		1.65%	1.65%	4.23%	13.17%	9.80%	6.49%		
182	SSGA Listed Infrastructure	272,791,614	3.16%	3.16%	7.53%	17.83%				
183	S&P GLOBAL LISTED INFRASTRUCTURE		3.29%	3.29%	7.32%	17.57%				

<sup>1</sup> HY Fixed Income Custom Blend is BC Global High Yield Corporate Index through 7/31/2016 then BC US High Yield 2% Issuer Cap Index thereafter.

<sup>2</sup> HY Emerging Markets Benchmark is 50% JP Morgan Emerging Markets Bond Index Global and 50% JP Morgan Government Bond Index-Emerging Markets Global Diversified.

<sup>3</sup> American Homes 4 Rent become a REIT 7/31/2013.

<sup>4</sup> REIT Benchmark is UBS Global Real Estate Investors Index through 12/31/2014 then FTSE EPRA/NAREIT Developed Rental Index thereafter.

		(A)	(B)	(C)	(D)	(E)	(F)	(G)
		Market Values as of 7/31/2017		Returns as of 6/30/2017				
				3 Month	CYTD	1 Year	3 Years	5 Years
184	<b>PRIVATE EQUITY AND GROWTH OPPORTUNITIES</b>	6,784,638,395		N/A	11.60%			
185	CAMBRIDGE PRIVATE EQUITY			N/A	3.95%			
186	<b>PRIVATE EQUITY</b>	4,161,711,528		N/A	11.96%	20.98%	17.22%	18.20%
187	PRIVATE EQUITY CUSTOM BENCHMARK			N/A	0.00%	4.80%	2.56%	9.44%
188	Staff Direct	531,487,311		10.84%	14.11%	24.03%	18.10%	Various
189	Rapid Partners LP	84,270,712		N/A	7.06%	4.35%		Net
190	Kelso Hammer LP	28,548,763		N/A	0.52%	11.00%		Gross
191	HV Legacy	1,237,119,103		7.84%	14.04%	22.89%	20.33%	19.05%
192	Pathway Capital Management	2,161,960,482		6.49%	11.16%	21.17%	15.29%	17.18%
193	BlackRock Co-investment Funds	118,325,156		N/A	3.39%	4.42%		Net
194	<b>GROWTH OPPORTUNITIES</b>	2,622,926,867		N/A	11.02%			Net
195	CAMBRIDGE PRIVATE EQUITY			N/A	3.95%			
196	<b>REAL ESTATE</b>	5,571,144,245		N/A	1.05%	4.45%	8.73%	9.85%
197	NCREIF TOTAL INDEX			N/A	3.32%	6.97%	10.17%	10.49%
198	LaSalle Investment Mgmt			0.40%	0.59%	1.74%	6.58%	8.83%
199	L&B Realty Advisors	2,149,277,813		1.62%	2.87%	7.27%	12.78%	12.64%
200	Simpson Housing (SHLP) REOC	1,379,064,831		0.94%	2.34%	6.18%	11.95%	12.23%
201	Sentinel Real Estate	1,163,333,644		-9.45%	-7.64%	-4.48%	5.21%	6.32%
202	Lincoln Industrial	78,160,069		6.63%	7.89%	17.58%		Net
203	CS Capital	414,564,011		3.28%	7.11%	15.39%		Net
204	LaSalle Investment Mgmt-United Kingdom	226,460,723		6.11%	8.01%	-24.05%	-17.43%	Net
205	CB Richard Ellis - Europe	160,283,154		7.33%	18.35%	25.14%		Net
206	<b>INFRASTRUCTURE, PRIVATE CREDIT AND INCOME OPPORTUNITIES</b>	3,157,740,648		N/A	5.36%			
207	INFRASTRUCTURE, PRIVATE CREDIT AND INCOME OPPORTUNITIES			N/A	8.57%			
208	<b>INFRASTRUCTURE</b>	1,870,660,259		N/A	5.60%	9.88%	14.96%	13.83%
209	FTSE DEVELOPED CORE INFRASTRUCTURE TRI			N/A	11.03%	9.58%	5.55%	10.67%
224	FTSE Core Developed Infrastructure TRI			4.30%	11.03%	9.58%	5.55%	10.67%
225	<b>PUBLIC/PRIVATE CREDIT</b>	1,117,969,966		3.52%	5.08%	10.35%	5.95%	8.03%
226	BC US HIGH YIELD 2% ISSUER CAP			2.17%	4.92%	12.69%	4.50%	6.90%
227	<b>INCOME OPPORTUNITIES</b>	169,110,423		2.84%	4.55%	9.52%	7.85%	
228	American Homes 4 Rent II	169,110,423		2.78%	4.44%	9.29%		Net
229	<b>ABSOLUTE RETURN</b>	2,170,180,530		0.78%	3.43%	7.66%	2.03%	3.70%
230	ABSOLUTE RETURN BENCHMARK			1.05%	3.59%	6.22%	5.90%	5.62%
231	<b>ASSET ALLOCATION</b>	3,927,640,335		0.14%	1.44%			
232	APF FI LIQUIDITY	799,861,045						
233	<b>CASH</b>	697,428,910		0.30%	0.36%	0.48%	0.19%	0.12%
234	90 DAY T-BILLS			0.20%	0.31%	0.49%	0.23%	0.17%
235	APF Internal Cash	697,428,910		0.30%	0.36%	0.48%	0.19%	0.12%
236	<b>MULTI-ASSET CLASS</b>	2,430,350,380		0.00%	2.38%	7.75%	3.96%	5.54%
237	PERFORMANCE BENCHMARK			2.62%	6.44%	10.25%	4.47%	7.96%
238	Bridgewater	799,763,954		-1.56%	0.77%	8.96%	3.10%	5.31%
239	AQR	827,379,656		-0.64%	1.34%	6.11%	6.52%	7.61%
240	Goldman Sachs	803,206,770		2.34%	5.23%	8.27%	2.35%	5.53%
241	CPI + 5%			0.49%	6.63%	3.89%	6.63%	5.92%